## (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

## (19) World Intellectual Property Organization International Bureau



## 1 DERIA BIRKEDIA II DERIKA KIRU BERIK BERIK BERIK ATAR IN DIR BERIK BIRKA BIRKA BIRKA BIRKA BERIKA BERIK BERIK

(43) International Publication Date 30 September 2004 (30.09.2004)

(10) International Publication Number WO 2004/082534 A1

(51) International Patent Classification7:

A61F 2/06

(21) International Application Number:

PCT/GB2004/001156

(22) International Filing Date: 18 March 2004 (18.03.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

18 March 2003 (18.03.2003) GB 0306176.9 GB 21 July 2003 (21.07.2003) 0317004.0 GB 11 September 2003 (11.09.2003) 0321327.9 11 December 2003 (11.12.2003) GB 0328757.0

(71) Applicant (for all designated States except US): VERYAN MEDICAL LIMITED [GB/GB]; Old Pockford Cottage, Vann Lane, Chiddingfold GU8 4XU (GB).

(72) Inventors; and

(75) Inventors/Applicants (for US only): CARO, Colin, G. [GB/GB]; Imperial College of Science, Technology and Medicine, Exhibition Road, London SW7 2AZ (GB). WATKINS, Nicholas, V. [GB/GB]; Imperial College of Science,, Technology and Medicine, Exhibition Road, London SW7 2AZ (GB). SHERWIN, Spencer, J. [GB/GB]; Imperial College of Science, Technology and Medicine, Exhibition Road, London SW7 2AZ (GB).

(74) Agent: FRANK B. DEHN & CO.; 179 Queen Victoria Street, London EC4V 4EL (GB).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

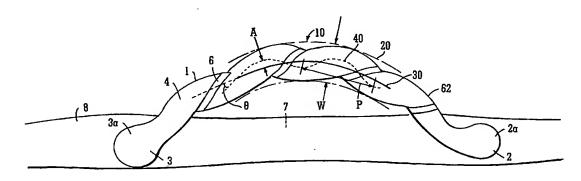
## Published:

with international search report

before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: HELICAL GRAFT



(57) Abstract: A graft comprising flow tubing having a tubing portion (1) defining a flow lumen, the flow lumen of said tubing portion being substantially free of ribs or grooves, wherein the centre line of the flow lumen follows a substantially helical path with a helix angle less than or equal to 65°, and wherein the amplitude (A) of the helix is less than or equal to one half of the internal diameter (Di) of the tubing portion.